

EMANUEL D. RUDOLPH'S ROLE FOR BIOLOGICAL ABSTRACTS

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ABSTRACT

The life of Emanuel Rudolph (1927–1992), noted polar lichenologist and historian of botany, was well documented by Ronald Stuckey. Rudolph's scholarly endeavors is further revealed through his devotion to Biological Abstracts. He accepted the intellectual challenge of preparing abstracts in 1952 when a graduate student in the Henry Shaw School of Botany at Washington University. From then as a volunteer, he prepared 382 abstracts through 1977, a most exacting and time consuming task, perhaps an art. Some background on procedures at Biological Abstracts is reviewed and Rudolph's role as a volunteer abstractor for Biological Abstracts/BIOSIS is assessed.

RESUMEN

La vida de Emanuel Rudolph (1927–1992), notable liquenólogo e historiador de la botánica, que fue bien documentada por los esfuerzos eruditos de Ronald Stuckey. Rudolph, se desvela en un grado mayor a través de su dedicación a los Resúmenes Biológicos. El aceptó el reto intelectual de preparar resúmenes en 1952 cuando era estudiante en la Escuela de Botánica Henry Shaw de la Universidad de Washington. Desde entonces como voluntario, preparó 382 resúmenes durante 1977, una tarea muy exigente y laboriosa, quizás un arte. Se revisan algunos antecedentes de los procedimientos de los Resúmenes Biológicos, y se evalúa el papel de Rudolph como voluntario en la elaboración de resúmenes para los Biological Abstracts/BIOSIS.

BACKGROUND ON ABSTRACTING AT BIOLOGICAL ABSTRACTS

The practice of abstracting emerged and developed after 1790, but its roots precede the advent of printing when annotations were placed in the margins of manuscripts. Scientific journal abstracts summarize articles in a succinct manner so that researchers have a clear idea of their content, and therefore value to them. *Biological Abstracts*, one of the pre-eminent abstracting journals in the field of biology, was first published in December 1926, formed by the merger of two existing abstract indexes, *Botanical Abstracts* and *Abstracts of Bacteriology* (Manzer 1977). Some general background in the production of abstracts is explained in the preliminary pages of the January 1955 volume of *Biological Abstracts*. The distinction between *Biological Abstracts*, the serial, and Biological Abstracts, the corporate name, was con-

fusing until the corporation title was changed to BioSciences Information Service of Biological Abstracts (BIOSIS) in October 1964 (Steere 1976).

In 1928 the editors of *Biological Abstracts* relied on 3,000 scientists throughout the world to provide abstracts on a voluntary basis (Biological Abstracts 1957). At that time such a large number of volunteers was needed because the inclusion of abstracts in journals was the exception rather than the rule. Due to financial difficulties, the publication of *Biological Abstracts* nearly ended in 1936. Following the reorganization of Biological Abstracts early in 1938, appeals to the biologists of the United States for volunteer support of the publishing venture were enthusiastically met. Although a new policy had been instituted in 1937 to compensate abstractors for their work in order to speed the preparation of abstracts, collaborators were now returning their monetary compensation. Nearly a year later collaborators "advocated a policy of gratis abstracting, and the payments for abstracting were therefore discontinued" (Flynn 1951). By 1956 the number of volunteer abstractors declined to 656 people who provided 50% of the needed abstracts, while 30% of the abstracts were written by the authors of articles and forwarded by the journal editor in batches, and the remaining 20% of the abstracts were provided by office staff of Biological Abstracts or copied from published abstracts or summaries (Biological Abstracts 1957).

In the late 1960s through the mid 1970s announcements appeared in the preliminary pages of *Biological Abstracts* for the solicitation of abstractors, especially for those willing to write abstracts for taxonomic publications. One can ascertain the number of volunteer abstractors from 1959 to the present from the lists of volunteer abstractors which were published in the introductory pages of issues of *Biological Abstracts* for these years. Only 45 volunteer abstractors were listed in 1995. John Schnepf, Chief, Literature Analysis Section, Bibliographic Control Department, BIOSIS, related that this list of abstractors may be eliminated since the inclusion of author abstracts by publishers is now standard practice. (phone conversation of 7 July 1995).

The value and impact of volunteer abstractors to the success of *Biological Abstracts* did not go unsung. Appreciative of the contributions of volunteer abstractors, the administration of Biological Abstracts maintained communication with these volunteers and extended its gratitude in various ways. For many years volunteers received a Christmas greeting which summarized the year's accomplishments and progress at Biological Abstracts and also thanked the volunteers for their work. Ann Farren, Associate Bibliographer, Literature Acquisition Department, stated in her greeting of 15 December 1961 that "Our personal contacts with you have been rare, usually confined to an occasional visit to BA's booth at national and international meetings. Sometimes you may even think that we have forgotten

you. Believe me this is never true. We are reminded and say a quiet 'thank you' each time a group of your abstracts are received." Among the sentiments of thanks that were echoed on numerous occasions by BIOSIS administrators, those of Phyllis V. Parkins, Director of BIOSIS, were especially touching when she stated that "on behalf of all biologists, [we] declare our deep gratitude and appreciation to our Abstracters for the contribution they continue to make in the communication of biological information. May the sun *never* set on BA Abstracters!" (Parkins 1965). When volunteers received updated, revised instructions for the preparation of abstracts or were given new or additional assignments, expressions of gratitude were usually made. Through the years volunteers were offered publications as a token of appreciation, such as: (1) retaining issues of journals for which abstracts were being prepared, and (2) receiving a complimentary subscription to different publications produced by Biological Abstracts, through a choice of either: a sectional edition of *Biological Abstracts (BA)*; *B.A.S.I.C.*, the subject index to BA; one topic of the *STANDARD PROFILE* Services; one member of the *BIORESEARCH TODAY* series; or the annual *BIOSIS List of Serials*.

EMANUEL D. RUDOLPH AS A VOLUNTEER ABTRACTOR

While a graduate student in the Henry Shaw School of Botany at Washington University and the affiliated Missouri Botanical Garden in St. Louis, Rudolph first volunteered as an abstractor for Biological Abstracts in 1952. Perhaps his major professor, Carroll W. Dodge, who was editor of the Biography, History and Bibliography section of *Biological Abstracts* since its beginning, influenced Rudolph's decision to write abstracts. Because of the broad scope of most of the journals in the 1950s and 1960s, many abstractors were assigned their work on a journal basis rather than by subject specialties. Emanuel Rudolph, however, was given abstract assignments for articles in botanical and antarctic research journals. His first assignment was to write abstracts for the Spanish language, botanical journal, *Lilloa*, most likely because he could read Spanish, was a student of botany, and had access to this journal in the Library at the Missouri Botanical Garden. In a letter to Rudolph (14 May 1952), John E. Flynn, Editor-in-Chief of Biological Abstracts, commended him for his fine abstracts. In October 1952, Dr. Flynn again wrote to Rudolph, complimenting him for his excellent abstracts and stating that such superb work was helping to build *Biological Abstracts* into an instrument of greater utility and better scholarship. He prepared abstracts for articles in volumes 16(1949)–31(1962) of *Lilloa*. Coinciding with the completion of his first assignment, Rudolph was offered, as a token of appreciation, a complimentary subscription to a Sectional Edition of *Biological Abstracts*. Whether or not Rudolph accepted

one of these sections is unknown. An itemization of the number of abstracts prepared by Rudolph for *Lilloa* and other serials is listed in Table 1 by serial title and volume.

Upon accepting a teaching position in the Department of Botany at Wellesley College, Massachusetts in the fall 1955, Rudolph wrote the editor of *Biological Abstracts* to relate that he no longer had access to *Lilloa*. After repeated correspondence to the publisher of *Lilloa*, the editor of *Biological Abstracts* succeeded in obtaining issues so Rudolph could continue to write abstracts for this journal. In fact, Rudolph was allowed to keep any issues sent to him. In June 1958 Rudolph became concerned that he had not received any copies of *Lilloa* for a long time. Apparently this was a turning point for him to accept a new abstracting assignment, for yet another Spanish language botany journal, *Anales del Instituto Botanico A.J. Cavanilles*, commencing with volume 17 (1959) and later concluding with volume 21 (1963).

In the 1960s significant changes occurred in Rudolph's professional life and in *Biological Abstracts*' reorganization. In the Spring of 1961 Rudolph started a new career as an Assistant Professor of Botany at The Ohio State University, Columbus, where rigorous research and an active teaching schedule occupied much of his time. These academic responsibilities would eventually diminish available time for writing abstracts. Considerable reorganization occurred at the offices of *Biological Abstracts* in the 1960s. Its Literature Acquisition Department saw expanded abstracting services due to the exponential increase in scientific journal publications and the computerization of operations. Ann Farren asked Rudolph in December 1961 if he would accept an additional assignment. Documentation is lacking whether Rudolph accepted another journal for abstracting when he returned from his Antarctic research expedition at the end of February 1962. Exactly three years later, Rudolph took on additional serials for abstracting. The new assignments began, and subsequently ended, with the following volumes of serials: *British Antarctic Survey Bulletin*, numbers 3 & 4(1964)–13(1967); *Commonwealth Mycological Institute. Miscellaneous Papers*, numbers 17 & 18(1964); and *Kirkia*, volumes 4(1963–64)–6, Part I(1967). Soon after these new assignments were made, another serial, *Commonwealth Mycological Institute, Mycological Papers*, which was a successor to the *CMI Miscellaneous Papers*, was added, commencing with number 99(1965) and concluding with number 141(1977).

Rudolph's busy teaching schedule and research work contributed to delays in his preparation of abstracts in the late 1960s. In fact he was unable to complete abstracts for the two Spanish language journals, *Anales del Instituto Botanico A.J. Cavanilles* and *Lilloa* because the extra time required to read these foreign language journals was not available. Rudolph reluctantly wrote

TABLE 1. Number of abstracts prepared by Emanuel D. Rudolph for Biological Abstracts, arranged by journal title.

Volume	Year	No. of Abstracts	Volume	Year	No. of Abstracts
Anales del Instituto Botanico A.J. Cavanilles			119	1969	1
17	1959	14	120	1970	1
18	1960	14	121	1970	1
19	1961	1	125	1971	1
20	1962	5	126	1971	1
21	1963	8	127	1971	1
22	1964	9	128	1972	1
	subtotal	51	129	1972	2
British Antarctic Survey Bulletin			130	1972	1
3	1964	4	131	1972	1
4	1964	0	132	1973	1
5	1965	1	134	1973	1
6	1965	4	135	1974	1
7	1965	3	136	1974	1
8	1966	5	137	1974	1
9	1966	3	138	1975	1
10	1966	2	139	1975	1
11	1967	0	141	1977	1
12	1967	1		subtotal	40
13	1967	4	Kirkia		
	subtotal	27	4	1963/64	19
Commonwealth Mycological Institute. Miscellaneous Publication			5	1966	14
17	1964	1	6(Part I)	1967	6
18	1964	1		subtotal	39
	subtotal	2	Lilloa		
Commonwealth Mycological Institute. Mycological Papers			16	1949	12
99	1965	1	17	1949	28
100	1965	1	18	1949	24
101	1965	2	19	1949	23
103	1965	1	20	1949	24
104	1966	1	21	1949	17
105	1966	1	22	1949[1951]	1
106	1966	1	23	1950	24
107	1967	1	24	1950	2
108	1967	1	25	1951[1952]	8
109	1967	1	26	1953	12
110	1968	1	27	1953[1955]	7
111	1967	1	28	1957	8
112	1967	1	29	1959	4
113	1968	1	30	1960	14
114	1968	1	31	1962	14
115	1968	1		subtotal	222
116	1969	1	Opera Lilloana		
117	1969	2	4	1962	1
118	1969	1		subtotal	1
				Grand total	<u>382</u>

to Robert Sutcliffe, Associate Bibliographer at BIOSIS (25 February 1969), that he had to return any outstanding issues of these two journals. According to Rudolph's own admission, his desire to complete abstracts was greater than his ability to write them at that time. During this same time more journals were beginning to provide author abstracts with articles, a practice becoming more commonplace. Because of this emerging practice Rudolph's abstracting assignments were cancelled for *British Antarctic Survey Bulletin* (July 1968) and *Kirkia* (April 1969).

Little documentation on Rudolph's abstracting role after 1977 is available. John Schnepf wrote Rudolph (22 September 1982) to ask if he was "still available to provide [abstracting] service in the future either for the same or for another journal." Rudolph's answer must have been affirmative as his name continued to appear in lists of volunteer abstractors in the preliminary pages of each issue of *Biological Abstracts* for 1982–1992. Even though he may not have been actively writing abstracts from 1978–1992, he was available if needed.

In the preparation of abstracts Rudolph was required to follow high standards established by the editorial staff of Biological Abstracts. Through the years guidelines, along with rules for abbreviating and acceptable abbreviations, were issued to aid the volunteer abstractor. Except for a few unsigned abstracts written in the late 1960s, Rudolph's abstracts were signed, E.D. Rudolph, and varied in length from one sentence to a whole column of text.

Emanuel Rudolph's role as an abstractor provided essential volunteer assistance at a time when Biological Abstracts was still seeking stability as a self-sustaining organization. A search in *Biological Abstracts* for articles appearing in the serials for which Rudolph prepared abstracts located 382 abstracts written by him. Through these abstracts Rudolph served his fellow biologists and the scientific community.

ARCHIVAL RESOURCES CITED AND CONSULTED

Emanuel Rudolph's archives dealing with his association with Biological Abstracts/BIOSIS are housed in the Herbarium, Museum of Biological Diversity, The Ohio State University, 1315 Kinnear Road, Columbus, Ohio 43212-1192 and curated by Dr. Ronald L. Stuckey, Professor Emeritus and Curator Emeritus, Department of Plant Biology, The Ohio State University, Columbus, Ohio.

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